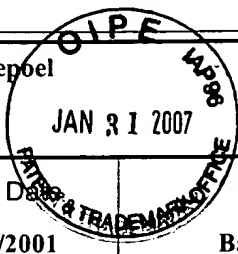


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TRANSMITTAL OF APPEAL BRIEF (Large Entity)

Docket No.  
0182.00001

In Re Application Of: Swanepoel



Application No.

09/806,800

Filing Date

06/25/2001

Examiner

Balsis, Shay L.

Customer No.

Group Art Unit

1744

Confirmation No.

6013

Invention: WINDSCREEN WIPER

COMMISSIONER FOR PATENTS:

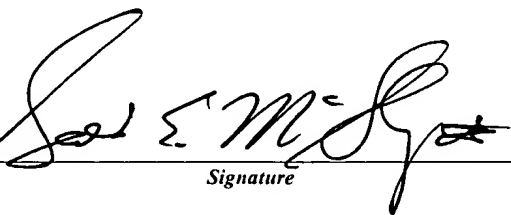
Transmitted herewith is the Appeal Brief in this application, with respect to the Notice of Appeal filed on:

November 28, 2006

The fee for filing this Appeal Brief is: \$500.00

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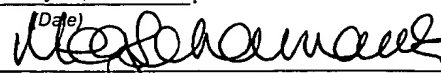
  
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Dated: January 26, 2007

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on

January 26, 2007



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Megan L. Schamanek

Typed or Printed Name of Person Mailing Correspondence

CC:



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Unit: 1744 )  
)  
Examiner: Balsis, Shay L. )  
)  
Inventor(s): Swanepoel )  
)  
Serial No.: 09/806,800 )  
)  
Filing Date: June 25, 2001 )  
)  
For: WINDSCREEN WIPER )  
\_\_\_\_\_ )

**APPEAL BRIEF**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Dear Sir:

By Notice of Appeal filed on November 28, 2006, applicant has appealed the final rejection of claims 1 – 10, 13 and 14 communicated in the Office Action dated August 8, 2006. Applicants submit this brief in support of that appeal.

01/31/2007 CCHAU1 00000052 09806800

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### **REAL PARTY IN INTEREST**

The real party in interest is TRICO Products Corporation, having a place of business at 3255 West Hamlin Road, Rochester Hills, Michigan 48309, as evidenced by the Assignment of the Inventors, Andriaan Retief Swanepoel, recorded on June 25, 2001 at Reel 012000 and Frame 0979 in the United States Patent and Trademark Office.

### **RELATED APPEALS AND INTERFERENCES**

There are no related appeals or interferences regarding the present application.

### **STATUS OF THE CLAIMS**

Claims 1 - 12 were originally pending in the PCT application to which this application claims priority. On September 20, 2000, in a paper submitted to the International Preliminary Examining Authority at the European Patent Office, claim 11 was cancelled. Also, claim 12 was canceled by way of a Preliminary Amendment filed April 3, 2001. Claim 13 was added by way of Preliminary Amendment filed July 2, 2004, and Claim 14 was added by way of an Amendment filed November 23, 2004.

Claims 1 – 10, 13 and 14 are currently pending in this application. Claims 1 – 10, 13 and 14 have been finally rejected. The rejection of claims 1 – 10, 13 and 14 is being appealed. A clean copy of claims 1 – 10, 13 and 14 is attached hereto at The Claims Appendix.

### **STATUS OF AMENDMENTS**

Claims 1 – 10 were originally, finally rejected via the Office Action dated February 2, 2004. Applicant filed a Request for Continued Examination, along with a Preliminary Amendment on July

2, 2004. Thereafter, the Examiner issued three more communications on August 23, 2004; January 31, 2005; and May 31, 2005 in connection with this matter. Applicant responded to each of these communications on November 23, 2004; April 18, 2005; and July 6, 2005, respectively. On August 22, 2005, claims 1 – 10, 13 and 14 were finally rejected. Applicant filed a Notice of Appeal on March 27, 2006 and followed this with an Appeal Brief dated May 24, 2006 along with all appropriate fees. Rather than a brief, the Examiner issued another Office Action dated August 8, 2006. Once again, claims 1 – 10, 13 and 14 were finally rejected. Applicant filed its second Notice of Appeal and paid the appropriate fee on November 28, 2006. The current brief is submitted in support of this appeal.

### **SUMMARY OF THE CLAIMED SUBJECT MATTER**

#### **A. Independent Claim 1**

The present invention as defined in independent claim 1 is directed toward a *beam blade* windscreen wiper having an elongate, curved backbone made out of a single, unitary, resiliently flexible beam (pg. 1, lns. 13 – 18; pg. 2, lns. 34 – 42; Fig. 1). A force applying member is connected to the backbone at two spaced apart points. Spacing distance,  $S$ , between the points falls within a range between  $0.1 * L$  and  $0.35 * L$ , where  $L$  is the total length of the backbone, and both  $S$  and  $L$  are expressed in millimeters. The curved shape of the backbone, the resiliently flexible material of the backbone, and the disclosed range of  $S$  allows the windscreen wiper of the present invention to achieve improved pressure distribution across the length of the wiper (pg. 2 – 3).

## **B. Independent Claim 2**

In another aspect, the present invention as defined in independent claim 2 is directed toward a *beam blade* windscreen wiper having an elongate, curved backbone made out of a single, unitary, resiliently flexible beam (pg. 1, lns. 13 – 18; pg. 2, lns. 34 – 42; Fig. 1). A force applying member is connected to the backbone at two spaced apart points. A ratio,  $R$ , of the spacing distance,  $S$ , to the total length of the backbone,  $L$ , falls within a range between 0.1 and 0.35, where  $S$  and  $L$  are expressed in the same unit of measure. The curved shape of the backbone, the resiliently flexible material of the backbone, and the disclosed range of  $R$  allows the windscreen wiper of the present invention to achieve improved pressure distribution across the length of the wiper (pg. 2 – 3).

## **C. Independent Claim 13**

The present invention as defined in independent claim 13 is directed toward a *beam blade* windscreen wiper having an elongate, curved backbone made out of a resiliently flexible material (pg. 1, lns. 13 – 18; pg. 2, lns. 34 – 42; Fig. 1). A force applying member is connected to the backbone at two spaced apart points. Spacing distance,  $S$ , between the points falls within a range between  $0.15 \cdot L$  and  $0.35 \cdot L$ , where  $L$  is the total length of the backbone, and both  $S$  and  $L$  are expressed in millimeters. The curved shape of the backbone, the resiliently flexible material of the backbone, and the disclosed range of  $S$  allows the windscreen wiper of the present invention to achieve improved pressure distribution across the length of the wiper (pg. 2 – 3).

## **D. Independent Claim 14**

The present invention as defined in independent claim 14 is directed toward a *beam blade* windscreen wiper having an elongate, curved backbone made out of a single, unitary, resiliently

flexible beam (pg. 1, lns. 13 – 18; pg. 2, lns. 34 – 42; Fig. 1). A force applying member is connected to the backbone at two spaced apart points. Spacing distance, S, between the points falls within a range between  $0.15*L$  and  $0.35*L$ , where L is the total length of the backbone, and both S and L are expressed in millimeters. At one of the points, the force applying member is connected to the backbone by means of a pin which is received in a longitudinal slot in the backbone so that relative longitudinal and pivotal movement between the pin and the backbone is permitted (pg. 2 – 3).

### **GROUND OF REJECTION TO BE REVIEWED ON APPEAL**

Claims 1 – 10 and 13 – 14 were finally rejected under 35 U.S.C. § 112, ¶ 1 as failing to comply with the written description requirement. In this context, the Examiner asserted that the limitation “beam blade” as used in the claims was considered “new matter.”

Claims 1 – 5, 7 – 10 and 13 – 14 were finally rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,899,800 issued to Wittwer, “as evidenced by” U.S. Patent No. 4,587,686 issued to Thompson.

Claim 6 was rejected under 35 U.S.C. § 103(a) as being unpatentable over the Wittwer ‘800 patent as applied to claim 1 under § 102(b), and further in view of U.S. Patent No. 3,192,551 issued to Appel.

### **ISSUES**

#### **A. 35 U.S.C. § 112**

Whether claims 1 – 10 and 13 – 14 fail to comply with 35 U.S.C. § 112, ¶ 1 on the basis that the term “beam blade” is not sufficiently supported by the specification (including the written description and the drawings).



**B. 35 U.S.C. § 102**

Whether each and every element recited in claims 1 – 5, 7 – 10 and 13 – 14 are anticipated by U.S. Patent No. 3,899,800 to Wittwer, “as evidenced by” U.S. Patent No. 4,587,686 to Thompson and therefore unpatentable under 35 U.S.C. § 102(b).

**C. 35 U.S.C. § 103**

Whether the invention described in claim 6 is obvious and therefore unpatentable under 35 U.S.C. § 103(a) over the Wittwer ‘800 patent as applied to claim 1 and further in view of U.S. Patent No. 3,192,551 issued to Appel.

**ARGUMENT**

**A. The Examiner’s Rejection**

In the final rejection dated August 8, 2006, the Examiner stated:

**DETAILED ACTION**

Applicant's argument presented in the appeal brief dated 5/26/06 have required further action and therefore, the finality of the rejection of the last Office action is withdrawn. However, this Office action is made final, since limitations were added to the claim which required further consideration.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-10 and 13-14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The amended claims include the limitation of a "beam blade". This is considered new matter and requires further consideration. The applicant's arguments in the appeal brief, have led the examiner to reconsidered the newly added limitation. Throughout the specification it is noted that the terminology "beam" is supported however "beam blade" is not. The applicant's argument imply that the new limitation of "beam blade" gives structure to the claim. There is no discussion in the original specification or the claims as to what a "beam blade" is or how it is different than any other wiper.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 7-10 and 13-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Wittwer (USPN 3899800) ***as evidenced by Thompson (USPN 4587686)***. (Emphasis added.)

With regards to claims 1, 2, 13 and 14, Wittwer teaches a wiper comprising a force-applying member (12) connected to the center backbone at two spaced apart points (31,32). The backbone or backing strip is a formed from a single, unitary, flexible material that is precurved or prebowed in a direction substantially parallel to the curvature of the windshield (col. 2, lines 57-59). Wittwer does not refer to the backbone as a beam, however, Thompson teaches a wiper blade with a beam (96; col. 10, lines 13-14) that could be used on a tournament style wiper (figure 8, col. 26-28). The beam of Thompson functions in the same manner as Wittwer and, therefore, as evidenced by Thompson a beam and a backing strip are considered the equivalent terminology in the art. Wittwer teaches a superstructure with four pairs of equally spaced apart claws (30, 31, 32 and 33) that slidably engage with the backing strip or beam (36) by means of claws with pin type structure that engage around the outer exposed longitudinal slot edge portions of the flexible backing strip. The remote claws (30, 33) are at a location 1/8 the length of the wiper blade element in from the ends. The four points of pressure being applied to the backing strip or beam at equally spaced apart locations between the remote pressure points beneath the claws (30, 33). It can be determined that the spacing between the two points (31, 32) is 1/4 the length of the wiper blade and the ratio of spacing to the total length is 1/4 (see

figure below), therefore,  $S=0.25*L$  and  $R=0.25$  which falls in the ranges claimed by the applicant.

With regards to claim 3, the preferred spacing distance  $S_p$  between the spaced apart points is *about*  $S_p=0.363*L-0.000146*L^2$ .

With regards to claim 4, the preferred ratio  $R_p$  is *about*  $R_p=0.363-0.000146*L$ .

With regards to claim 5, the force applying member is connected to the backing strip or beam in such a manner as to permit relative longitudinal displacement between the force applying member and the backing strip or beam (col. 3, lines 7-30).

With regards to claim 7, the curved backing strip or beam has a constant thickness along its length (figures 1-5 show the same thickness throughout).

With regards to claim 8, the curved backing strip or beam has a constant width along its length since the yokes do not change. The same clips are used to connect all four points on the backing strip or beam.

With regards to claim 9 and 10, the backing strip or beam has a free form curvature in a plane (along the x-direction without contact with the window) as well as compound curvature (when in contact with the window, the blade in the x-direction is curved taking the shape of the window and in the y-direction when the blade is in motion the ends of the blade could be curved upward or downward of the middle depending on the direction of the blade movement).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

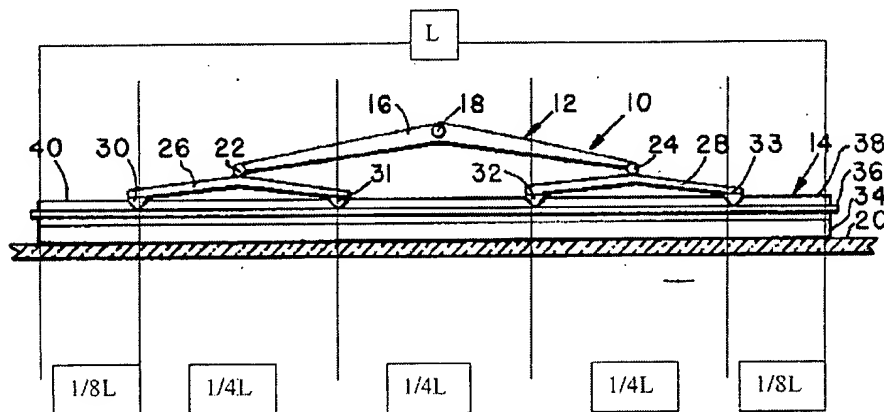
The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.

3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wittwer (USPN 3899800) as applied to claim 1 above and further in view of Appel (USPN 3192551).

Wittwer teaches all the essential elements of the claimed invention however fails to teach that the curved backing strip or beam has a varying width and thickness. Appel teaches a curved backing strip comprising a varying width and thickness. It would have been obvious to modify the invention of Wittwer to have a backing strip or beam that varies in width and thickness as taught by Appel to provide substantially uniform pressure along the length of contact between the flexible rubber wiping blade and the windshield. Additionally, it would accommodate a correspondingly smaller radius of curvature while retaining appropriate width for resisting lateral drag loads without undue distortion (col. 1, lines 34-48).



### *Response to Arguments*

Applicant's arguments with respect to claims 1-10 and 13-14 have been considered but are moot in view of the new ground(s) of rejection.

The applicant's added the terminology of "beam blade" to the claimed (sic). The specification does not clearly disclose what the limitations of a beam blade are or how it is different than any other wiper blade. Even in the arguments, the applicant fails to specify exactly what the difference between a "beam blade" and a "tournament-style blade" are. The applicant provides the definition of a beam however that definition holds true for the prior art blades. The blades of the prior art have one dimension large compared with the other dimensions, whose function is to carry lateral loads and bending movements. The applicant's arguments lead one to believe that "beam blade" gives structure to the claim and this structure is not

supported in the specification. The specification only discloses information about "beams".

## **B. Summary of the Applicant's Argument on Appeal**

Applicant respectfully submits that the rejection under § 112 is improper because "beam blade" is a well known term of art and because the beam blade windshield wiper system of the type described in the claims is clearly shown in the figures with reference to the written description. Thus, applicant respectfully submits that the term "beam blade" is adequately supported by the specification in this case and does not constitute new matter.

Applicant also submits that the Examiner has advanced an improper rejection under § 102 because she relies, not only on the Wittwer '800 patent, but also the Thompson '686 patent to support this rejection. In any event, each and every element of claims 1 – 5, 7 – 10 and 13 – 14 cannot be found in the disclosure of either of these patents. Thus, none of these claims are anticipated by either the Wittwer et al. or Thompson patents.

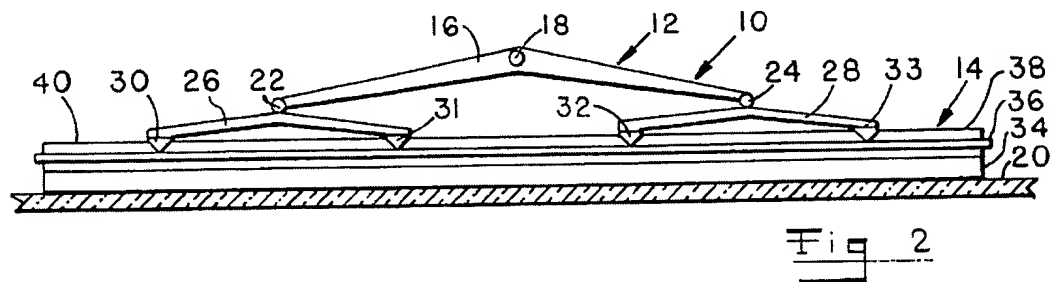
Claim 6 is ultimately dependent upon independent claim 1 and adds further perfecting limitations. Applicant respectfully submits that the final rejection of claim 6 is based on hindsight and relies on an improper reconstruction of the prior art, without any motivation in the art to do so. For these reasons as explained in greater detail below, applicant respectfully seeks reversal of the final rejection of claims 1 – 10, 13 and 14 pending in this case.

## **C. The Prior Art**

### **1. The Wittwer et al. '800 patent**

The Wittwer et al. '800 patent discloses a conventional "tournament style" windshield wiper blade assembly 10 having a superstructure 12. The superstructure 12 is adapted to be connected to

the end of a windshield wiper arm, and the windshield wiper arm applies pressure to the wiper blade assembly 10 (col. 2, ll. 35 – 37). The superstructure 12 includes *four conventional claws* 30, 31, 32, 33 that are connected to the wiper blade element 14. The Examiner asserts that the Wittwer et al. '800 patent employs a “center backbone” or “backing strip” that is formed of a “single, unitary, flexible, material.” In this context, the Examiner is simply parroting the language of claims 1, 2, 13 and 14. Nevertheless, this characterization of the Wittwer et al. '800 patent is incorrect. Rather, the Wittwer et al. '800 patent discloses the use of a superstructure 12 having *a pair* of backing strips 36 only one of which is illustrated in the side view of this patent. Backing strips of the type disclosed in this patent are also commonly known in the art as “rails.” The backing strips 36 are “nested in *a pair of sidewardly opening grooves* formed in the head portion 38” of the wiping member 34 (col. 2, ll. 45 – 50, emphasis added). Thus, the Wittwer et al. '800 patent merely discloses a conventional “tournament” style windshield wiper system using a pair of backing strips 36 each of which is supported in outwardly opening grooves formed in the wiping member. The use of a pair of backing strips or “rails” in this manner has been known in the related art for many years. Figure 2 of the Wittwer patent is reproduced below.



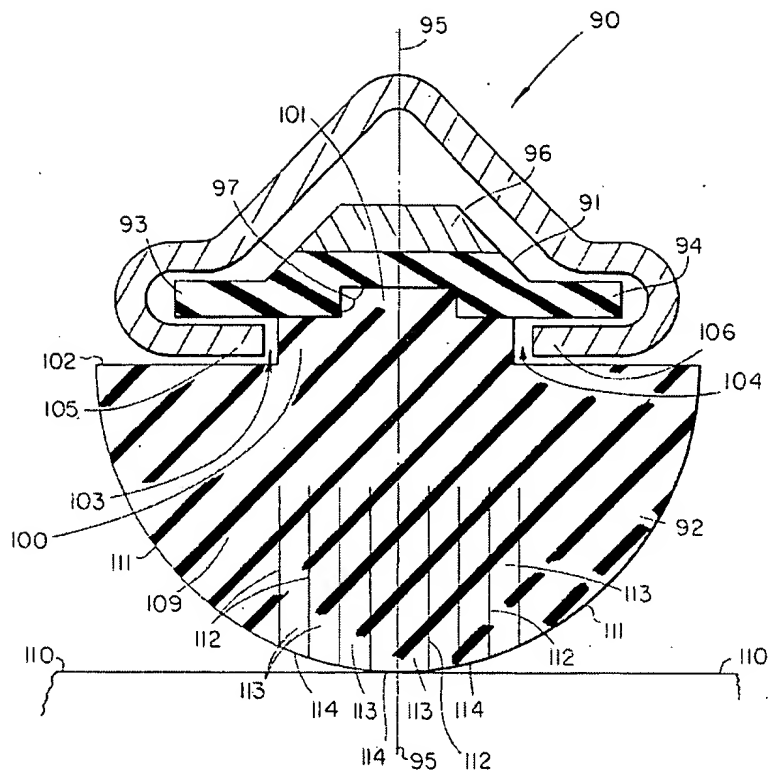
However, as clearly illustrated in Figure 2 above, the Wittwer et al. '800 patent does *not* disclose a *beam blade* windscreen wiper that includes an *elongate curved backbone* which is made of a *single, unitary, resiliently flexible beam*. In addition, this patent does not disclose or suggest

## 2. The Thompson ‘686 patent

In Figure 1, the Thompson ‘686 patent discloses a windshield wiper assembly including a cantilevered spring wiper arm 11, a superstructure 12, and a wiper insert 13 (col. 4, ll. 19 – 24). The wiper insert 13 is attached to the superstructure 12 only at ends 18 and 19 (col. 4, ll. 53 – 55). Thompson teaches that, “this feature represents a significant departure from conventional wiper assemblies which employ a superstructure adapted to receive the wiper insert at at least four spaced apart locations along the length of the insert” (col. 4, ll. 55 – 59). In this context, the Thompson ‘686 patent teaches away from the structure illustrated in the Wittwer et al. ‘800 patent.



14



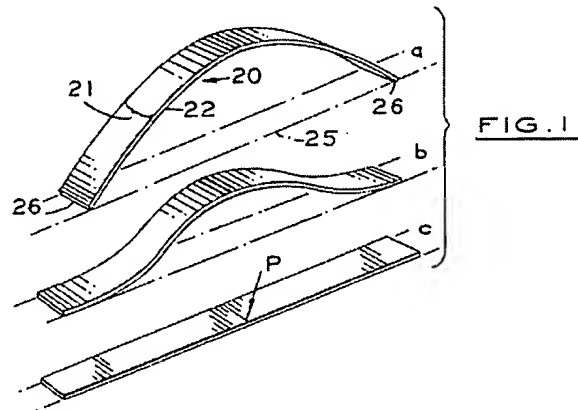
**Fig.11**

### **3. The Appel '551 patent**

The Appel '551 patent discloses a beam blade windshield wiper with a spring backbone element 36 and an attached rubber blade 37. The spring backbone 36 can be attached to an actuating arm via a *single attachment clip 41* (col. 3, ll. 63 – 75; col. 4, ll. 1 – 3). However, the Appel '551 patent does *not* disclose or suggest a force applying member which is connected to the backbone at two spaced apart points *with the spacing distance  $S$  between the points being between  $S = 0.1L$  and  $S = 0.35L$*  as set forth in claim 1. The Appel '551 patent also does *not* disclose or suggest a force applying member which is connected to the backbone at two spaced apart points *with the ratio  $R$  between 0.1 and 0.35* as set forth in claim 2. Furthermore, the Appel '551 patent does *not* disclose or suggest a force applying member which is connected to the backbone at two spaced apart points

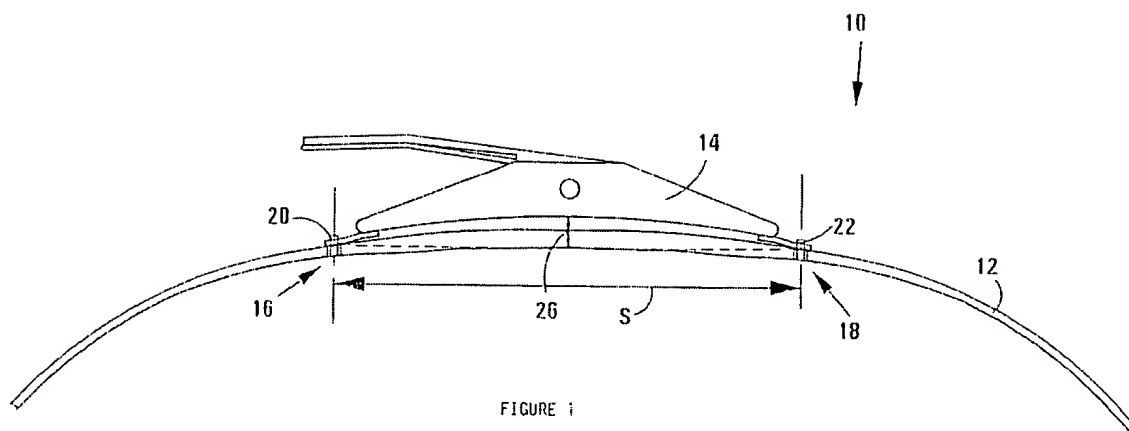


*with the spacing distance  $S$  between the points being between  $S = 0.15L$  and  $S = 0.35L$  as set forth in claim 13. Still further, the Appel '551 patent does **not** disclose or suggest a force applying member which is connected to the backbone at two spaced apart points **with the spacing distance  $S$  between the points being between  $S = 0.1L$  and  $S = 0.35L$** , wherein at one of the points, the force applying member is connected to the backbone **by means of a pin which is received in a longitudinal slot in the backbone** so that relative longitudinal and pivotal movement between the pin and the backbone is permitted as set forth in claim 14.*



#### **4. The windshield wiper assembly of the present invention**

The beam blade windshield wiper of the present invention is illustrated in Figure 1 of the present application and reproduced below. This device is described in each of independent claims 1, 2, 13 and 14.



**a. Independent claim 1**

In contrast to the related art, the present invention as defined in independent claim 1 is directed toward a **beam blade** windscreen wiper having an elongate, curved backbone made out of a single, unitary, resiliently flexible beam. A force applying member is connected to the backbone **at two spaced apart points**. Spacing distance,  $S$ , between the points falls within a range between  $0.1 \cdot L$  and  $0.35 \cdot L$ , where  $L$  is the total length of the backbone, and both  $S$  and  $L$  are expressed in millimeters. The curved shape of the backbone, the resiliently flexible material of the backbone, and the disclosed range of  $S$  allows the windscreen wiper of the present invention to achieve improved pressure distribution across the length of the wiper.

**b. Independent claim 2**

In another aspect, the present invention as defined in independent claim 2 is directed toward a **beam blade** windscreen wiper having an elongate, curved backbone made out of a single, unitary, resiliently flexible beam. A force applying member is connected to the backbone **at two spaced apart points**. A ratio,  $R$ , of the spacing distance,  $S$ , to the total length of the backbone,  $L$ , falls within a range between 0.1 and 0.35, where  $S$  and  $L$  are expressed in the same unit of measure. The curved shape of the backbone, the resiliently flexible material of the backbone, and the disclosed

range of R allows the windscreen wiper of the present invention to achieve improved pressure distribution across the length of the wiper.

**c. Independent claim 13**

In still another aspect, the present invention as defined in independent claim 13 is directed toward a **beam blade** windscreen wiper having an elongate, curved backbone made out of a resiliently flexible material. A force applying member is connected to the backbone **at two spaced apart points**. Spacing distance, S, between the points falls within a range between  $0.15 \cdot L$  and  $0.35 \cdot L$ , where L is the total length of the backbone, and both S and L are expressed in millimeters. The curved shape of the backbone, the resiliently flexible material of the backbone, and the disclosed range of S allows the windscreen wiper of the present invention to achieve improved pressure distribution across the length of the wiper.

**d. Independent claim 14**

In still another aspect, the present invention as defined in independent claim 14 is directed toward a **beam blade** windscreen wiper having an elongate, curved backbone made out of a single, unitary, resiliently flexible beam. A force applying member is connected to the backbone **at two spaced apart points**. Spacing distance, S, between the points falls within a range between  $0.15 \cdot L$  and  $0.35 \cdot L$ , where L is the total length of the backbone, and both S and L are expressed in millimeters. At one of the points, the force applying member is connected to the backbone **by means of a pin which is received in a longitudinal slot in the backbone** so that relative longitudinal and pivotal movement between the pin and the backbone is permitted.

## **D. Discussion**

### **1. 35 U.S.C. § 112**

- a. The term “beam blade” is fully supported by the written description and the drawings. The rejection of claims 1 – 10 and 13 – 14 under 35 U.S.C. § 112 should be reversed.*

Claims 1 – 10 and 13 – 14 were rejected under 35 U.S.C. § 112, ¶ 1, as containing subject matter which the Examiner asserts “was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.” More specifically, the examiner asserts that the term “beam blade” as it is used in the claims constitutes new matter. Applicant respectfully submits that the rejection under § 112 is improper and must be reversed.

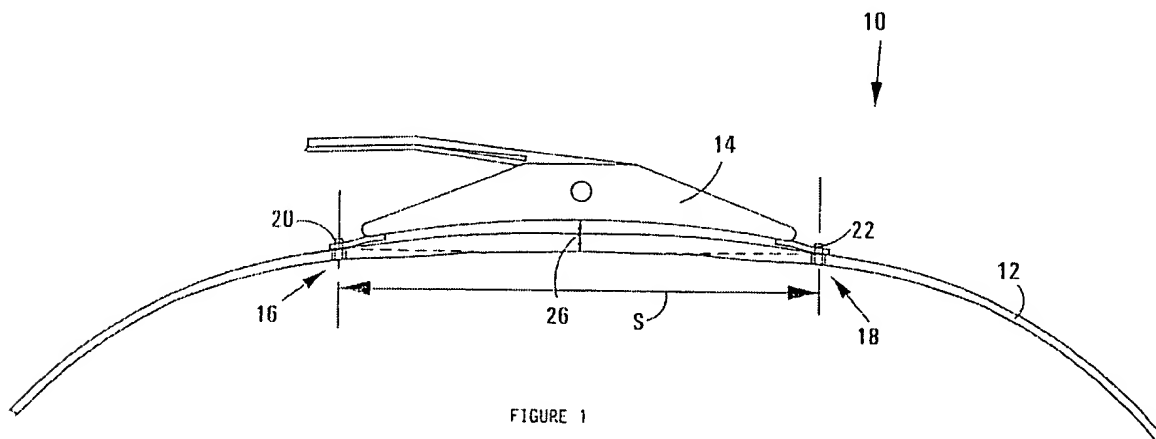
The first paragraph of § 112 provides that, “the specification shall contain a written description of the invention....” “The description requirements purposes are to assure that the applicant was in full possession of the claimed subject matter on the application filing date and to allow other inventors to develop and obtain patent protection for later improvements and subservient inventions that build on applicant’s teachings.” See In re Barker, 559 F.2d 588, 194 U.S.P.Q. (BNA) 470 (C.C.P.A. 1977), *cert. denied*, 434 U.S. 1064 (1978); Vas-Cath Inc. v. Mahurkar, 935 F.2d 1555, 19 U.S.P.Q. 2d (BNA) 1111 (Fed. Cir. 1991); and In re Dossel, 115 F.2d 942, 42 U.S.P.Q. 2d (BNA) 1881 (Fed. Cir. 1997).

The subject matter of the claim need not be described literally or *in haec verba* in order for the specification to satisfy the description requirement. See Fujikawa v. Wattanasin, 93 F.3d 1559, 1570, 39 U.S.P.Q. 2d (BNA) 1895, 1904 (Fed. Cir. 1996). “An *ipsis verbis* disclosure is not necessary to satisfy the written description requirement of § 112. Instead, the disclosure need only reasonably convey to a person skilled in the art that the inventor had possession of the subject matter

in question.”; In re Alton, 76 F.3d 1168, 1175, 37 U.S.P.Q. 2d (BNA) 1578, 1584 (Fed. Cir. 1996) (“If a person of ordinary skill in the art would have understood the inventor to have been in possession of the claimed invention at the time of filing, even if every nuance of the claim was not explicitly described in the specification, then the adequate written description requirement is met.”)

Thus, the dispositive issue is whether applicant’s disclosure in the patent application reasonably conveys to the artisan that the inventor had possession of the claimed subject matter at the time of filing. The threshold step in resolving this issue is to determine whether the Examiner has met her burden of proof by advancing acceptable reasoning to the effect that the term “beam blade” is inconsistent with the specification, including the written description and the drawings. Applicant respectfully submits that the Examiner has not carrier her burden in this regard.

The specification clearly states that the invention relates to a windscreen wiper having a curved elongate backbone and that the backbone may be in the form of a beam (pg. 1, ll. 13 – 18). Each of independent claims 1, 2, 13 and 14 is directed toward a beam blade windscreen wiper that includes an elongate curved backbone which is made of a single, unitary resiliently flexible beam. This structure is illustrated in Figure 1 which is reproduced below:



The present invention is therefore directed toward a certain type of windshield wiper assembly commonly known in the art as a “beam blade.” Beam blade windshield wiper assemblies do not have a “super structure” as that term is commonly used in connection with “tournament style” windshield wiper systems – another well known term in the art.

In view of the above, applicant respectfully submits that the disclosure reasonably conveys to the artisan that the inventor had possession of the invention (a beam blade type windshield wiper assembly having an elongate curved backbone which is made of a single, unitary, resiliently flexible beam) at the time the application was filed. At a minimum, applicant respectfully submits that a beam blade type windshield wiper assembly is clearly illustrated in Figure 1. Further, applicant respectfully submits that a person of ordinary skill in the art would reasonably understand that the present invention is directed toward a beam blade type windshield wiper assembly (as opposed to a tournament style windshield wiper assembly) from an initial, cursory inspection of Figure 1 and even before reference was made to the written description. Accordingly, applicant respectfully submits that claims 1 – 10 and 13 – 14 fully comply with the requirements of 35 U.S.C. § 112, ¶ 1 and that the Examiner’s rejection of the claims on this basis should be reversed.

## **2. 35 U.S.C. § 102**

- a. The cited references alone or in combination, do not disclose each and every element of the independent claims. Neither of these references anticipates the present invention.***

Claims 1 – 5, 7 – 10 and 13 – 14 were rejected under 35 U.S.C. § 102(b) as being anticipated by the Wittwer ‘800 patent “as evidenced by” the Thompson ‘686 patent. A claim is said to be anticipated where each and every element of the claim can be found in a single prior art reference. In this case, the Examiner has combined two references in support of the rejection of the claims under §

102. This is improper. Nevertheless, neither the Wittwer '800 nor the Thompson '686 patents, alone or in combination, disclose each and every element of independent claims 1, 2, 13 and 14.

The Examiner relies on the Wittwer et al. '800 patent for its teaching of a superstructure 12 attached *at four points* to the backing strip 36, wherein the spacing between two of the points is within the range claimed in claims 1, 2, 13, and 14. However, the Wittwer et al. '800 patent discloses a mounting method for a *tournament style* windscreen wiper assembly. In contrast, the windscreen wiper disclosed in amended claims 1, 2, 13, and 14 of the patent application is a *beam blade* windscreen wiper. The importance of the distinguishing feature of the beam blade type windscreen wiper assembly as opposed to the tournament style wiper assembly cannot be overemphasized in this case.

Here, the Examiner suggests that the backing strip 36 of the Wittwer et al. '800 patent constitutes the backbone made of a single, unitary, resiliently flexible beam claimed in each of claims 1, 2, 13, and 14. However, as noted above, the Wittwer et al. '800 patent actually teaches the conventional use of two backing strips 36 supported in opposed grooves formed in the wiper element 14. Because the Wittwer et al. '800 patent discloses a traditional mounting method for a tournament style windscreen wiper assembly, and because the backing strip 36 does not independently force a wiper blade transversely onto the windshield, Applicant respectfully submits that a person having ordinary skill in the art would not recognize the traditional backing strips 36 as being a backbone made of a single, unitary, resiliently flexible beam. Thus, Applicant respectfully submits that the Wittwer et al. '800 patent fails to disclose or suggest a *beam blade* windscreen wiper that includes an *elongate curved backbone* which is made of a *single, unitary, resiliently flexible beam* as claimed in each of claims 1, 2, 13, and 14 of the present application.

***b. A rejection based on measurements taken from the Wittwer et al. drawings is improper.***

As noted above, rather than a force applying member that is connected to a single backbone at two spaced apart points, the Wittwer et al. '800 patent teaches the use of a superstructure 12 having four conventional claws that are connected to the wiper blade element 14. This distinction alone undermines the contention that the Wittwer et al. '800 patent anticipates the subject matter of the independent claims in this case. Nevertheless, the Examiner goes on to reject the claims based upon the perceived location of various ones of the mounting claws 30, 31, 32 and 33 disclosed in this patent.

More specifically, the Examiner relies on measurements taken from the drawings of the Wittwer et al. '800 patent in support of the rejection of claims 1 – 5, 7 – 10 and 13 – 14 under 35 U.S.C. § 102. The Examiner has determined that some of the remote claws are located at a position determined to be  $\frac{1}{8}$  the length of the wiper blade element shown in Figure 1. The location of other remote claws have been determined by the Examiner to be located at  $\frac{1}{4}$  the length of the wiper blade. Based on this determination, the Examiner proceeds to parrot certain language of claims 1 – 4, 13 and 14 in support of the rejection of these claims under § 102.

The applicant respectfully submits that the Examiner's measurements are an improper basis for the rejection because the drawings in the Wittwer et al. '800 patent are not to scale and are silent as to dimensions. MPEP § 2125. Moreover, applicant respectfully submits that the Examiner's "calculations" with respect to claims 3 and 4 are unclear and appear simply to be a restatement of the language of these claims. In any event, beyond the fact that patent drawings are not to scale and the Wittwer et al. '800 patent is silent as to dimensions, the use of measurements taken from patent drawings to find ratios has been expressly rejected by the Court of Appeals for the Federal Circuit. Hockerson-Halberstadt, Inc. v. Avia Group Int'l, Inc., 222 F.3d 951 (Fed. Cir. 2000). In that case,



the court rejected an argument that the ratio of a width of a groove in relation to the width of fins of a shoe was disclosed in a patent drawing because the patent did not disclose that the drawings were to scale and did not include dimensions. In rejecting this argument, the court stated, “patent drawings do not define the precise proportions of the elements and may not be relied on to show particular sizes if the specification is completely silent on the issue.” *Id.* at 956. Here, as in Hockerson-Halberstadt, the Examiner has improperly taken measurements of the Wittwer et al. ‘800 patent drawings to find a ratio and use that ratio as a basis for the rejection of claims 1 – 4, 13 and 14.

Interestingly, at pages 2 – 4 of the January 31, 2005 Office Action, the Examiner advanced substantially the same type of rejection based on calculations derived from a different prior art patent. In the April 18, 2005 response to the January 31, 2005 Office Action, applicant relied on the same Hockerson-Halberstadt authority for the proposition that a rejection of this type is improper. In the May 31, 2005 Office Action issued in response to this Amendment, at page 6 under the heading “Response to Arguments” the Examiner indicated that, “[t]he applicant’s arguments regarding measurements and ratios in drawings are accepted.” Applicant respectfully submits that these arguments should be likewise accepted by this tribunal.

*c.       The Wittwer et al. ‘800 patent does not disclose  
the claimed spacing of attachment points.*

Notwithstanding any improper use of the drawings of the Wittwer et al. ‘800 patent to support the rejection advanced by the Examiner, applicant respectfully submits that the Wittwer et al. ‘800 patent does not disclose a beam blade windscreen wiper having an elongate, curved backbone made out of a single, unitary, resiliently flexible beam, and a force applying member connected to the backbone **at two spaced apart points**, wherein the spacing distance, S, between the points falls within a range between  $0.1 * L$  and  $0.35 * L$ , wherein L is the total length of the backbone, and wherein both S and L are expressed in millimeters as set forth in independent claim 1.

Likewise, the Wittwer et al. '800 patent does not disclose or suggest a beam blade windscreen wiper having an elongate, curved backbone made out of a single, unitary, resiliently flexible beam, and a force applying member connected to the backbone at two spaced apart points, wherein a ratio,  $R$ , of the spacing distance,  $S$ , to the total length of the backbone,  $L$ , falls within a range between 0.1 and 0.35, wherein  $S$  and  $L$  are expressed in the same unit of measure as set forth in claim 2.

Further, the Wittwer et al. '800 patent does not disclose or suggest a beam blade windscreen wiper having an elongate, curved backbone made out of a resiliently flexible material, and a force applying member connected to the backbone at two spaced apart points, wherein the spacing distance,  $S$ , between the points falls within a range between  $0.15 \cdot L$  and  $0.35 \cdot L$ , wherein  $L$  is the total length of the backbone, and both  $S$  and  $L$  are expressed in millimeters as set forth in claim 13.

Still further, the Wittwer et al. '800 patent does not disclose or suggest a beam blade windscreen wiper having an elongate, curved backbone made out of a single, unitary, resiliently flexible beam, and a force applying member connected to the backbone at two spaced apart points, wherein the spacing distance,  $S$ , between the points falls within a range between  $0.15 \cdot L$  and  $0.35 \cdot L$ , wherein  $L$  is the total length of the backbone, wherein both  $S$  and  $L$  are expressed in millimeters, and wherein at one of the points, the force applying member is connected to the backbone by means of a pin which is received in a longitudinal slot in the backbone so that relative longitudinal and pivotal movement between the pin and the backbone is permitted as set forth in claim 14.

The Thompson '686 patent does not make up for the deficiencies in the Wittwer et al. '800 patent. And, even if it did, it is not proper to combine references to support a rejection under § 102.

In the end, applicant respectfully submits that each and every element of independent claims 1, 2, 13 and 14 cannot be found, nor are they suggested, by either the Wittwer et al. '800 or the

Thompson '686 patents. Accordingly, applicant respectfully submits that the independent claims are allowable over the rejection under 35 U.S.C. § 102. Claims 2 – 5 and 7 – 10 are each ultimately dependent upon claims 1 or 2 and add perfecting limitations. Accordingly, applicant respectfully submits that claims 2 – 5 and 7 – 10 are also allowable over the rejection under 35 U.S.C. § 102.

### **3. 35 U.S.C. § 103**

Claim 6 was rejected under 35 U.S.C. § 103(a) as being unpatentable over the Wittwer et al. '800 patent as applied to claim 1 as discussed above and further in view of the Appel '551 patent. As noted above, the present invention is directed toward a beam blade type windscreen wiper. The Wittwer et al. patent discloses a tournament style windshield wiper having a superstructure 12 connected to the wiper element 14 via four conventional claws 30, 31, 32 and 33. On the other hand, the Appel '551 patent discloses a beam blade windshield wiper having a spring backbone element 31 attached to a rubber blade 37 via a single attachment clip 41. Claim 6 is ultimately dependent upon independent claim 1 and adds the further perfecting limitation that the curved backbone has a varying width and thickness, along its length. Applicant respectfully submits that the combination of Wittwer et al. and Appel is improper because the windshield wiper assemblies disclosed in both of these patents is structurally dissimilar and because there is no motivation to combine the teachings of these references.

A rejection based on 35 U.S.C. § 103 must rest on a factual basis, with the facts being interpreted without a hindsight reconstruction of the invention from the prior art. In making this evaluation, the Examiner has the initial duty of supplying the factual basis for the rejection she advances. She may not, because she doubts the invention is patentable, resort to speculation, unfounded assumptions, or hindsight reconstruction to supply deficiencies in the factual basis. See,

In re Warner, 379 F.2d 1011, 154 U.S.P.Q. (BNA) 173 (C.C.P.A. 1967). Thus, in the context of an analysis under § 103, it is not sufficient merely to identify one reference that teaches several of the limitations of a claim and another that teaches several limitations of a claim to support a rejection based on obviousness. This is because obviousness is not established by combining the basic disclosures of the prior art to produce the claimed invention absent a teaching or suggestion that the combination be made. Interconnect Planning Corp. v. Fiel, 774 F.2d 1132, 1143, 227 U.S.P.Q. (BNA) 543, 551 (Fed. Cir. 1985); In re Corkhill, 771 F.2d 1496, 1501-02, 226 U.S.P.Q. (BNA) 1005, 1009-10 (Fed. Cir. 1985). The relevant analysis invokes a cornerstone principle of patent law:

That all elements of an invention may have been old (the normal situation), or some old and some new, or all new, is . . . simply irrelevant. Virtually all inventions are combinations and virtually all are combinations of old elements. Environmental Designs v. Union Oil Co. of Cal., 713 F.2d 693, 698 (Fed. Cir. 1983) (other citations omitted).

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A patentable invention . . . may result even if the inventor has, in effect, merely combined features, old in the art, for their known purpose without producing anything beyond the results inherent in their use. American Hoist & Derek Co. v. Sowa & Sons, Inc., 220 U.S.P.Q. (BNA) 763, 771 (Fed. Cir. 1984) (emphasis in original, other citations omitted).

As the Court of Appeals for the Federal Circuit has noted in the past, “[w]hen a rejection depends upon a combination of prior art references, there must be some teaching, suggestion, or motivation to combine the references.” Ecolochem, Inc. v. Southern Calif. Edison, 56 U.S.P.Q. 2d 1065, 1073 (Fed. Cir. 2000). There must be a rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references. In re Dembiczak, 175 F.3d 994, 999 (Fed. Cir. 1999). This is because “combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor’s disclosure as a blueprint for piecing

together the prior art to defeat patentability.” Id. Accordingly, to establish a rejection under 35 U.S.C. § 103, a person of ordinary skill in the art must not only have had some motivation to combine the prior art teachings, but also some motivation to combine the prior art teachings in the particular manner claimed. See, e.g., In re Kotzab, 217 F.3d 1365, 1371 (Fed. Cir. 2000). In other words, the Examiner must show *reasons* that the skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed. In re Rouffet, 149 F.3d 1350, 1357 (Fed. Cir. 1998).

*a. The Wittwer and Appel references are structurally dissimilar and cannot be combined*

As noted above, the Wittwer et al. patent discloses a conventional tournament style windshield wiper assembly. The Appel patent discloses a beam blade type windshield wiper assembly. These two devices could not be more different. Here, it is respectfully submitted that the Examiner is picking and choosing elements from the structurally dissimilar devices disclosed in the Wittwer et al. and Appel patents and combining these elements by restructuring them, using hindsight and the applicant’s own disclosure, to conclude that the claimed invention is obvious. This is improper. There is a fundamental axiom in patent law that if a reference must be reconstructed or rearranged to change its operation to meet the applicant’s claim, that modification of the reference is inappropriate and cannot stand.

Here, both the Wittwer et al. and the Appel patent would each have to be substantially reconstructed in order to begin to approach the device disclosed in independent claim 1, as it is further modified by dependent claim 6.

***b. No motivation to combine teachings of references***

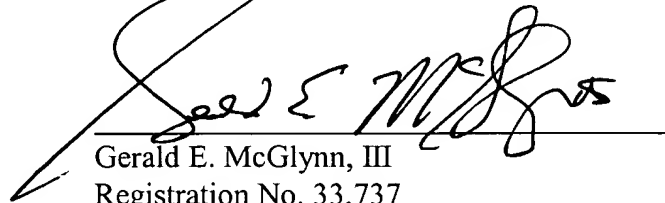
In support of the rejection of claim 6 on the basis of the Wittwer et al. '800 patent in view of the Appel '551 patent, the Examiner states that it "would have been obvious to modify the invention of Wittwer to have a backbone that varies in width and thickness as taught by Appel to provide substantially uniform pressure along the length of contact between the flexible rubber wiping blade and the windshield." The Examiner continues by stating "it would accommodate a correspondingly smaller radius of curvature while retaining appropriate width for resisting lateral drag loads without undue distortion." (See pg. 5, August 8, 2006 Final Rejection.) Applicant respectfully submits that the Examiner is again engaging in impermissible hindsight and is taking the claimed invention as a blueprint for piecing together the prior art in support of the rejection under 35 U.S.C. § 103. Applicant respectfully submits that there is simply no motivation provided in the Wittwer et al. '800 or Appel '551 patents to combine any of their teachings. Accordingly, Applicant respectfully submits that this rejection based on 35 U.S.C. § 103 is improper and should be reversed.

**CONCLUSION**

In view of the above, it is respectfully submitted that claims 1 – 10, 13 and 14 are not anticipated by either the Wittwer et al. or Thompson patents. Moreover, these claims recite structure that is not disclosed or suggested by the prior art references of record in this case. However, even if they did, they could only be applied through hindsight after restructuring the disclosure of the prior art in view of applicant's invention. A rearrangement and restructure of both the tournament and beam blade style windshield wipers described in the references to derive applicant's invention would, in and of itself, be an invention.

Applicant respectfully submits that the claims presently pending in this appeal clearly distinguish over the prior art and are therefore allowable. Accordingly, applicant respectfully solicits a reversal of the final rejection and allowance of the claims pending in this case.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Gerald E. McGlynn, III", is written over a horizontal line.

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Attorney Docket No. 0182.00001

## CLAIMS APPENDIX

1. A beam blade windscreen wiper which includes  
an elongate curved backbone which is made of a single, unitary, resiliently flexible beam;  
and

a force applying member which is connected to the backbone at two spaced apart points  
with the spacing distance S (expressed in millimetres) between the points being between

$$S_1 = 0.1 * L \dots\dots\dots (1)$$

and

$$S_2 = 0.35 * L \dots\dots\dots (2)$$

where the length L is the total length of the backbone expressed in millimetres.

2. A beam blade windscreen wiper which includes  
an elongate curved backbone which is made of a single, unitary, resiliently flexible beam;  
and

a force applying member which is connected to the backbone at two spaced apart points  
with the ratio R of spacing distance S between the points and the total length L ( $R = S/L$ )

being between

$$R_1 = 0.1 \dots\dots\dots (3)$$

and

$$R_2 = 0.35 \dots\dots\dots (4)$$

where the spacing distance S and the length L are expressed in the same units of measure.



3. The beam blade windscreen wiper as claimed in Claim 1, in which the preferred spacing distance  $S_p$  between the spaced apart points is about

$$S_p = 0.363 * L - 0.000146 * L^2 \dots\dots\dots (5)$$

4. The beam blade windscreen wiper as claimed in Claim 2, in which the preferred ratio  $R_p$  is about

$$R_p = 0.363 - 0.000146 * L \dots\dots\dots (6)$$

5. The beam blade windscreen wiper as claimed in Claim 1, in which the force applying member is connected to the backbone in such a manner as to permit relative longitudinal displacement between the force applying member and the backbone.

6. The beam blade windscreen wiper as claimed in Claim 1, in which the curved backbone has a varying width and thickness, along its length.

7. The beam blade windscreen wiper as claimed in Claim 1, in which the curved backbone has a constant thickness along its length.

8. The beam blade windscreen wiper as claimed in Claim 1, in which the curved backbone has a constant width along its length.

9. The beam blade windscreen wiper as claimed in Claim 1, in which the backbone has a free form curvature in a plane.

10. The beam blade windscreen wiper as claimed in Claim 1, in which the backbone has a compound curvature.

11. (Cancelled)

12. (Cancelled)

13. A beam blade windscreen wiper which includes  
an elongate curved backbone which is of a resiliently flexible material; and  
a force applying member which is connected to the backbone at two spaced apart points  
with the spacing distance S (expressed in millimetres) between the points being between

$$S_1 = 0.15 * L \dots\dots\dots (1)$$

and

$$S_2 = 0.35 * L \dots\dots\dots (2)$$

where the length L is the total length of the backbone expressed in millimetres.

14. A beam blade windscreen wiper which includes  
an elongate curved backbone which is made of a single, unitary, resiliently flexible beam;  
and  
a force applying member which is connected to the backbone at two spaced apart points  
with the spacing distance S (expressed in millimetres) between the points being between

$$S_1 = 0.1 * L \dots\dots\dots (1)$$

and

$$S_2 = 0.35 * L \dots\dots\dots (2)$$

where the length L is the total length of the backbone expressed in millimeters, and wherein at one of the points, the force applying member is connected to the backbone by means of a pin which is received in a longitudinal slot in the backbone so that relative longitudinal and pivotal movement between the pin and the backbone is permitted.

## **EVIDENCE APPENDIX**

None.

## **RELATED PROCEEDINGS APPENDIX**

None.